



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

May 31, 2016

Edward Kavanagh
KC Dairy, LLP
48612 212th Street
Elkton, SD 57026

Re: KC Dairy, LLP Manure Management System
Revised Volume Calculations

Dear Mr. Kavanagh:

The Department of Environment and Natural Resources (DENR) has received four copies of your proposal to receive wastewater from the Bel Brands USA cheese plant in Brookings, South Dakota. Your permitted manure management system is located in the Southwest ¼ of Section 21, Township 110 North, Range 47 West, in Brookings County, South Dakota.

Your permitted manure management system is for a housed lot feeding a maximum of 2,200 dairy cattle (1,900 mature dairy cattle and 300 dairy calves). The existing manure management system consists of three freestall barns, a maternity barn, a calving barn, a milking parlor barn, a calf barn, individual calf hutches, a commodities area, a feed storage trench silo, a solid manure stockpiling site, a sand settling lane, a concrete sand stacking pad, piping, diversion dikes or channels, three holding ponds, and 4.49 acres of drainage area. The solid manure stockpiling site is designed for 270 days of solids storage capacity. The holding pond system meets the requirements of the permit and has at least 270 days of liquid storage capacity.

The proposed revision includes receiving one million gallons of wastewater from the Bel Brands USA cheese plant in Brookings, South Dakota on a yearly basis. The wastewater will be placed in the settling pond (south pond), pumped to the north holding ponds, and then land applied to fields in your nutrient management plan. With the extra wastewater, the manure management system will still have at least 270 days of liquid storage capacity.

We have reviewed and hereby conditionally approve the proposal. Two copies of the revised volume calculations are being kept for our files. Please replace the appropriate pages in your plans and specifications booklet with the revised pages enclosed with this letter and add any additional pages enclosed with this letter into your plans and specifications booklet. Please see the following requirements. **You cannot receive more than one million gallons of wastewater from Bel Brands per year without prior department approval.**

Erosion Protection

You must ensure the wastewater from Bel Brands is placed into the settling pond (south pond) in a manner that does not damage the clay liner of the pond.

Operation and Maintenance Guideline

You must submit a signed, revised operation and maintenance (O&M) guideline that includes the requirement to keep records on site of the dates and volumes of wastewater from Bel Brands. **You must submit the signed, revised O&M guideline to the department before the first load is accepted from Bel Brands.**

Accepting this wastewater may require additional maintenance of the settling pond and pumping system because of the solids in it. We encourage you to discuss this with your engineer now and as wastewater is accepted to determine if additional changes should be made to the dairy's O&M guideline. **With the addition of this wastewater, you are still responsible for operating your manure management system in compliance with the general water pollution control permit for concentrated animal feeding operations and your permit application.**

Nutrient Management Plan (NMP)

You must submit a revised NMP spreadsheet that indicates there is adequate land available for land application with the addition of the Bel Brands wastewater. **You must submit the revised NMP spreadsheet to the department before the first load is accepted from Bel Brands.**

Land Application

The department recommends you review the Bel Brands waste characteristics with your crop consultant to ensure it is suitable for land application.

Our review is primarily to assure that the system meets the requirements of the general permit and does not cover items such as quality of materials, structural soundness, or electrical and mechanical design features. Approval of the plans and specifications does not in any way release the producer from the responsibility that the project will be an operable facility when construction is completed.

You are responsible for contacting your local planning and zoning office to determine if there are any local ordinances or requirements with which you need to comply.

KC Dairy, LLP
May 31, 2016
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If you have any questions regarding the content of this letter, please contact Ben Myers, Feedlot Permit Program, at (605) 773-3351. Thank you for your cooperation.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Kent R. Woodmansey', with a long horizontal flourish extending to the right.

Kent R. Woodmansey, PE, Engineering Manager
Feedlot Permit Program

cc: Brian Friedrichsen, PE, Dakota Environmental, Inc., PO Box 636, Huron, SD 57350
Luke Muller, FDALG, PO Box 1207, Watertown, SD 57201
Brookings County Commissioners